

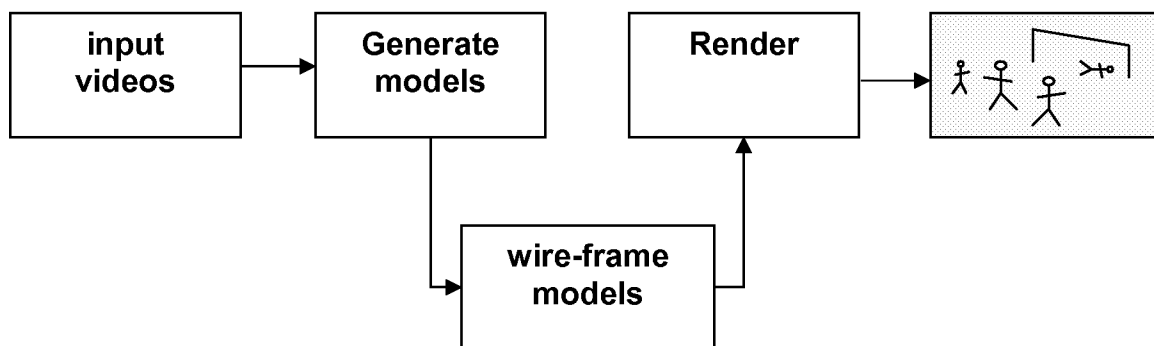
Remarks

Claims 1-29 are pending in the application. Claims 1-29 are rejected. All rejections are respectfully traversed.

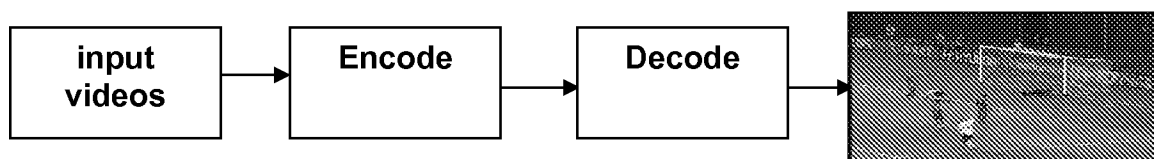
Claim 8 has been amended to overcome the 35 U.S.C. 112 rejection. Claim 9 is canceled.

4. Claims 1-3, 5-24 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ritchey (US 5,495,576).

Richey can never anticipate what is claimed. Richey uses sensor signals to generate and manipulate computer graphic models, and then renders the models.



This is not what is claimed. Claimed is video in, video out.



Viewers of television programs of real-world events in real-time, e.g., soccer games, do not want to see some fake, cartoonish, virtual reality imitation in the form of crude wire-frame model like a video arcade, see column 15:

paint applications. The computer system may function as a simulator controller if the display means of the present 20 invention are used as simulators or as a game controller if the systems are employed as arcade games. The computer

They want to see the real thing. Ritchey cannot do this. In addition, it is also impossible, for Ritchey to convert videos to graphic models in real-time.

This is not described at column 10:

10

INPUT MEANS

Referring to FIG. 1 in more detail, input means comprises a 3-D camera system 6, 3-D digitizing system 7, and 3-D audio system 8. Preferably, at least one image sensor 28 of
5 each image system, at least one shape sensor 29 of each 3-D digitizing system, and at least one accoustical sensor 30 of at least one audio system are positioned adjacent to one another and record a continuous corresponding segment of the subject 13. FIG. 2 illustrates a panoramic camera system

and column 26:

The initializer is a general-purpose computer of digital circuit that "fills in" the portions of the surface model left incomplete by the high-level image processor. The unknown
65 areas of the surface model are computed by surface functions such as B-splines that depend on some numerical parameter p. The surface functions are represented digitally

It is well known in the art, that converting videos to computer graphic models, and then to render the models is extremely complex and time consuming. Such activities are typically performed off-line in a preprocessing step.

With respect to claims 2 and 8 claimed is a plurality of cameras to acquire calibration images displayed on the display surface of the three-dimensional

display unit to determine the viewing parameters, certainly not at columns
11 and 12:

When a single camera 6 is incorporated, the images are
optically integrated into a single frame. 65

Any of these arrangements may be incorporated with
array 36, or array assembly 44 of the system 1.

Although simple optical systems are depicted in FIGS.
2-7, it should be clear to one skilled in the art that more
complex optical arrangements can be employed. Other opti-
cal elements and electro-optical components that may be
5 included are automatic shutters, automatic focusing devices,
optical filters and coatings, image intensifiers, correcting and
inverting lenses, lens adapters, sensitive recording surfaces
and media of various types and formats, wavelengths, and
resolutions, and so forth and so on. These various optical
10 arrangements are given the designer to accomplish a given
task. Standard video compression devices can be incorpo-

With respect to claim 22-24, it is unclear which prior art the Examiner is
referencing. The claimed elements are certainly not described by Ritchey.
Furthermore, the rejections are nothing but omnibus rejection. The elements
in claims 22 are distinct from the elements in claims 23-24. MPEP
§2141.01(a), first paragraph, states, "In order to rely on a reference as a basis
for rejection of an applicant's invention, the reference must either be in the
field of applicant's endeavor, or, if not, then be reasonably pertinent to the
particular problem with which the inventor was concerned." As is
recognized in MPEP 707.07(d), "omnibus rejection of the claim ...is usually
not informative and should therefore be avoided." MPEP 707.07(f) further
mandates that "where a major technical rejection is proper, it should be
stated with a full development of the reasons rather than by a mere
conclusion coupled with some stereotyped expression."

The rejection by the Examiner is a mere conclusion, without a full
development of reasons. MPEP 706.07 further makes clear that "the

invention as disclosed and claimed should be thoroughly searched in the first action and the references should be fully applied." In the present application, the rejection fails not only to provide a reasonable rational as to how, in the examiner's view, the applied art can be construed to teach each and every feature in the rejected claims, but the rejection also fails to even consider explicitly claimed features of the invention as recited in claim 22-24.

It is believed that this application is now in condition for allowance. A notice to this effect is respectfully requested. Should further questions arise concerning this application, the Examiner is invited to call Applicants' attorney at the number listed below. Please charge any shortage in fees due in connection with the filing of this paper to Deposit Account 50-0749.

Respectfully submitted,
Mitsubishi Electric Research Laboratories, Inc.

By
_____/Dirk Brinkman/

Dirk Brinkman
Attorney for the Assignee
Reg. No. 35,460

201 Broadway, 8th Floor
Cambridge, MA 02139
Telephone: (617) 621-7517
Customer No. 022199